

## **DEPARTMENT OF TRANSPORTATION**

### **Federal Aviation Administration**

#### **14 CFR Part 39**

**[Docket No. FAA-2005-20080; Directorate Identifier 2003-NM-193-AD; Amendment 39-14802; AD 2006-22-05]**

**RIN 2120-AA64**

#### **Airworthiness Directives; Various Aircraft Equipped With Honeywell Primus II RNZ-850( )/-851( ) Integrated Navigation Units**

**AGENCY:** Federal Aviation Administration (FAA), Department of Transportation (DOT).

**ACTION:** Final rule.

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**SUMMARY:** The FAA is superseding an existing airworthiness directive (AD), which applies to various aircraft equipped with certain Honeywell Primus II RNZ-850( )/-851( ) integrated navigation units (INUs). That AD, as one alternative for compliance, provides for a one-time inspection to determine whether a certain modification has been installed on the Honeywell Primus II NV-850 navigation receiver module (NRM), which is part of the INU. In lieu of accomplishing this inspection, and for aircraft found to have an affected NRM, the existing AD provides for revising the aircraft flight manual to include new limitations for instrument landing system approaches. This new AD requires inspecting to determine whether certain modifications have been done on the NRM; and doing related investigative, corrective, and other specified actions, as applicable; as well as further modifications to address additional anomalies. This AD results from reports indicating that erroneous glideslope indications have occurred on certain aircraft equipped with the subject INUs. We are issuing this AD to ensure that the flightcrew has an accurate glideslope deviation indication. An erroneous glideslope deviation indication could lead to the aircraft making an approach off the glideslope, which could result in impact with an obstacle or terrain.

**DATES:** This AD becomes effective December 1, 2006.

The Director of the Federal Register approved the incorporation by reference of certain publications listed in the AD as of December 1, 2006.

**ADDRESSES:** You may examine the AD docket on the Internet at <http://dms.dot.gov> or in person at the Docket Management Facility, U.S. Department of Transportation, 400 Seventh Street SW., Nassif Building, Room PL-401, Washington, DC.

Go to <https://pubs.cas.honeywell.com> or contact Honeywell International, Inc., Commercial Electronic Systems, 21111 North 19th Avenue, Phoenix, Arizona 85027-2708, for service information identified in this AD.

**FOR FURTHER INFORMATION CONTACT:** J. Kirk Baker, Aerospace Engineer, Systems and Equipment Branch, ANM-130L, FAA, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California 90712-4137; telephone (562) 627-5345; fax (562) 627-5210.

## **SUPPLEMENTARY INFORMATION:**

### **Examining the Docket**

You may examine the airworthiness directive (AD) docket on the Internet at <http://dms.dot.gov> or in person at the Docket Management Facility office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The Docket Management Facility office (telephone (800) 647-5227) is located on the plaza level of the Nassif Building at the street address stated in the ADDRESSES section.

### **Discussion**

The FAA issued a supplemental notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to include an AD that supersedes AD 2003-04-06, amendment 39-13054 (68 FR 8539, February 24, 2003). The existing AD applies to various aircraft equipped with certain Honeywell Primus II RNZ-850/-851 integrated navigation units (INUs). That supplemental NPRM was published in the Federal Register on May 18, 2006 (71 FR 28827). That supplemental NPRM proposed to continue to require inspecting to determine whether certain modifications have been done on the NRM; and doing related investigative, corrective, and other specified actions, as applicable; as well as further modifications to address additional anomalies.

### **Comments**

We provided the public the opportunity to participate in the development of this AD. We have considered the comments received from the single commenter.

### **Request To Clarify Reply to Comment to Original NPRM**

The commenter, Air Wisconsin, has requested an explanation of our reply to its comment to the original NPRM. The original comment requested clarification of the proposed requirements for inspecting to determine the modification level of the NRM and proposed that paragraph (k) of the original NPRM be revised to state that paragraph (j) of the AD need not be performed under certain conditions. The commenter asserts that our reply to that original comment was contradictory and confusing because we stated that we had made no change to paragraph (k) of the original NPRM when, in fact, paragraph (k) of the supplemental NPRM had been changed.

We acknowledge the commenter's concern. As stated in our original reply, we determined that paragraph (j) of the AD is required regardless of compliance time or the findings of paragraph (f); this is because paragraph (j) requires inspecting for Mod N, P, R, or T, as well as Mod L. Therefore, we did not change paragraph (k) of the original NPRM as the commenter suggested. However, we determined that paragraph (k) was incorrect in that it stated that paragraph (f) did not need to be done if paragraph (j) was accomplished within the compliance time specified by paragraph (f). Paragraph (f) of the AD deals with compliance times and has no findings, while paragraph (g) of the AD

requires an inspection and has findings. Therefore, it was our intent to revise paragraph (k) to read as it appears in the supplemental NPRM; that is, if paragraph (j) is accomplished within the compliance time specified by paragraph (f), paragraph (g) does not need to be done. We have made no further changes to paragraph (k) of the AD in this regard.

### **Explanation of Change To Applicability**

We have revised the applicability of the AD to identify model designations as published in the most recent type certificate data sheet for the affected models.

### **Clarification of INU References**

The applicability of the supplemental NPRM specifies that the AD applies to aircraft "equipped with a Honeywell Primus II RNZ-850/-851 INU having a part number identified in Table 1 of this AD." However, the Honeywell service bulletins identified in the following table variously refer to "-850/-851," "-850/A/B/C," "-851/A/B/C," and "-850(X)/-851(X)" INUs, indicating that the RNZ-850/-851 part number might or might not contain a suffix letter. Although the service bulletins identified in the following table make it clear that the INU part numbers, as identified in Table 1 of the AD, are the primary identifiers of all affected INUs, we have determined that these various suffix references could cause confusion. Therefore, to address all references to suffix letters in the service bulletins, we have revised the AD to read "-850( )/-851( )" where applicable.

<b>Honeywell Service Information</b>		
<b>Honeywell</b>	<b>Revision Level</b>	<b>Date</b>
Alert Service Bulletin 7510100-34-A0034	Original	February 28, 2003
Alert Service Bulletin 7510100-34-A0035	Original	July 11, 2003
Alert Service Bulletin 7510134-34-A0016	001	March 4, 2003
Service Bulletin 7510134-34-0018	Original	July 8, 2004
Service Bulletin 7510100-34-0037	Original	July 8, 2004

### **Conclusion**

We have carefully reviewed the available data, including the comments received, and determined that air safety and the public interest require adopting the AD with the changes described previously. We have determined that these changes will neither increase the economic burden on any operator nor increase the scope of the AD.

### **Costs of Compliance**

For the purposes of this AD, we estimate that there are 3,063 aircraft worldwide that may be equipped with a part that is subject to this AD, including about 1,500 aircraft of U.S. registry.

The inspection to determine whether Mod L has been done, which is currently required by AD 2003-04-06 and retained in this AD, will take about 1 work hour per aircraft, at an average labor rate of \$80 per work hour. Based on these figures, the estimated cost of the currently required actions is \$80 per aircraft.

## **Authority for This Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, Section 106, describes the authority of the FAA Administrator. Subtitle VII, Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701, "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

## **Regulatory Findings**

We have determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a "significant regulatory action" under Executive Order 12866;
- (2) Is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and
- (3) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared a regulatory evaluation of the estimated costs to comply with this AD and placed it in the AD docket. See the ADDRESSES section for a location to examine the regulatory evaluation.

## **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

## **Adoption of the Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

### **PART 39—AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

#### **§ 39.13 [Amended]**

2. The FAA amends § 39.13 by removing amendment 39-13054 (68 FR 8539, February 24, 2003) and adding the following new airworthiness directive (AD):

# AIRWORTHINESS DIRECTIVE

[www.faa.gov/aircraft/safety/alerts/](http://www.faa.gov/aircraft/safety/alerts/)  
[www.gpoaccess.gov/fr/advanced.html](http://www.gpoaccess.gov/fr/advanced.html)

U.S. Department  
of Transportation  
**Federal Aviation  
Administration**



**2006-22-05 Various Aircraft:** Amendment 39-14802. Docket No. FAA-2005-20080; Directorate Identifier 2003-NM-193-AD.

## Effective Date

- (a) This AD becomes effective December 1, 2006.

## Affected ADs

- (b) This AD supersedes AD 2003-04-06.

## Applicability

(c) This AD applies to aircraft, certificated in any category, equipped with a Honeywell Primus II RNZ-850( )/-851( ) integrated navigation unit (INU) having a part number identified in Table 1 of this AD; including, but not limited to, BAE Systems (Operations) Limited (Jetstream) Model 4101 airplanes; Bombardier Model BD-700-1A10 series airplanes; Model Bombardier CL-215-6B11 (CL-415 variant) series airplanes; Cessna Model 560, 560XL, and 650 airplanes; Dassault Model Mystere-Falcon 50 series airplanes; AvCraft Dornier Model 328-100 and -300 series airplanes; Empresa Brasileira de Aeronautica S.A. (EMBRAER) Model EMB-135 airplanes and Model EMB-145, -145ER, -145MR, -145LR, -145XR, -145MP, and -145EP airplanes; Learjet Model 45 airplanes; Raytheon Model Hawker 800XP and Hawker 1000 airplanes; and Sikorsky Model S-76A, S-76B, and S-76C aircraft.

**Table 1 – INU Part Numbers**

Part Numbers
7510100-811 through 7510100-814 inclusive
7510100-831 through 7510100-834 inclusive
7510100-901 through 7510100-904 inclusive
7510100-911 through 7510100-914 inclusive
7510100-921 through 7510100-924 inclusive
7510100-931 through 7510100-934 inclusive

**Note 1:** This AD applies to Honeywell Primus II RNZ-850( )/-851( ) INUs installed on any aircraft, regardless of whether the aircraft has been otherwise modified, altered, or repaired in the area subject to the requirements of this AD. For aircraft that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (m) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the

unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

## **Unsafe Condition**

(d) This AD results from reports indicating that erroneous glideslope indications have occurred on certain aircraft equipped with the subject INUs. We are issuing this AD to ensure that the flightcrew has an accurate glideslope deviation indication. An erroneous glideslope deviation indication could lead to the aircraft making an approach off the glideslope, which could result in impact with an obstacle or terrain.

## **Compliance**

(e) You are responsible for having the actions required by this AD performed within the compliance times specified, unless the actions have already been done.

## **Requirements of AD 2003-04-06**

### **Compliance Time For Action**

(f) Within 5 days after March 11, 2003 (the effective date of AD 2003-04-06), accomplish the requirements of either paragraph (g) or (h) of this AD. After the effective date of this AD, only accomplishing the requirements of paragraph (g) of this AD is acceptable for compliance with this paragraph.

### **Inspection To Determine Part Number**

(g) Perform a one-time general visual inspection of the modification plate for the Honeywell Primus II NV-850 Navigation Receiver Module (NRM); part number 7510134-811, -831, -901, or -931; which is part of the Honeywell Primus II RNZ-850( )/-851( ) INU; to determine if Mod L has been installed. The modification plate is located on the bottom of the Honeywell Primus II RNZ-850( )/-851( ) INU, is labeled NV-850, and contains the part number and serial number for the Honeywell Primus II NV-850 NRM. If Mod L is installed, the letter L will be blacked out. Honeywell Alert Service Bulletin 7510100-34-A0035, dated July 11, 2003, is an acceptable source of service information for the inspection required by this paragraph.

(1) If Mod L is installed, before further flight, do paragraph (h) or (j) of this AD. After the effective date of this AD, only accomplishment of paragraph (j) is acceptable for compliance with this paragraph.

(2) If Mod L is not installed, no further action is required by this paragraph.

**Note 2:** For the purposes of this AD, a general visual inspection is defined as: "A visual examination of an interior or exterior area, installation, or assembly to detect obvious damage, failure, or irregularity. This level of inspection is made from within touching distance unless otherwise specified. A mirror may be necessary to enhance visual access to all exposed surfaces in the inspection area. This level of inspection is made under normally available lighting conditions such as daylight, hangar lighting, flashlight, or droplight and may require removal or opening of access panels or doors. Stands, ladders, or platforms may be required to gain proximity to the area being checked."

**Note 3:** For more information on the inspection specified in paragraph (g) of this AD, refer to Honeywell Technical Newsletter A23-3850-001, Revision 1, dated January 21, 2003.

## **Aircraft Flight Manual (AFM) Revision**

(h) Revise the Limitations section of the AFM to include the following statements (which may be accomplished by inserting a copy of the AD into the AFM):

### **"Flight Limitations**

When crossing the Outer Marker on glideslope, the altitude must be verified with the value on the published procedure.

For aircraft with a single operating glideslope receiver, the approach may be flown using normal procedures no lower than Localizer Only Minimum Descent Altitude (MDA).

For aircraft with two operating glideslope receivers, the aircraft may be flown to the published minimums for the approach using normal procedures if both glideslope receivers are tuned to the approach and both crew members are monitoring the approach using independent data and displays."

### **Parts Installation**

(i) As of March 11, 2003, no person may install a Honeywell Primus II NV-850 NRM on which Mod L has been installed, on the Honeywell Primus II RNZ-850( )/-851( ) INU of any aircraft, unless paragraph (h) or (k) of this AD is accomplished. As of the effective date of this AD, only accomplishment of paragraph (k) is acceptable for compliance with this paragraph.

### **New Requirements of This AD**

### **Inspection To Determine Modification Level of NRM**

(j) For aircraft on which Mod L was found to be installed during the inspection required by paragraph (g) of this AD, or for aircraft on which paragraph (h) of this AD was accomplished: Within 24 months after the effective date of this AD, do an inspection of the modification plate on the Honeywell Primus II NV-850 NRM; part number 7510134-811, -831, -901, or -931; which is part of the Honeywell Primus II RNZ-850( )/-851( ) INU; to determine if Mod L, N, P, R or T is installed. The modification plate located on the bottom of the Honeywell Primus II RNZ-850( )/-851( ) INU is labeled NV-850, and contains the part number and serial number for the Honeywell Primus II NV-850 NRM. If Mod L, N, P, R or T is installed, the corresponding letter on the modification plate will be blacked out. Honeywell Alert Service Bulletin 7510100-34-A0035, dated July 11, 2003, is an acceptable source of service information for this inspection. If Mod T is installed, no further action is required by this paragraph. If Mod L, N, P, or R is installed, before further flight, do all applicable related investigative, corrective, and other specified actions, in accordance with the Accomplishment Instructions of Honeywell Alert Service Bulletin 7510100-34-A0035, dated July 11, 2003; and Honeywell Service Bulletin 7510100-34-0037, dated July 8, 2004; to ensure that the NRM is at the Mod T configuration. Once the actions in this paragraph are completed, the AFM revision required by paragraph (h) of this AD may be removed from the AFM.

**Note 4:** Honeywell Alert Service Bulletin 7510100-34-A0035, dated July 11, 2003, refers to Honeywell Alert Service Bulletin 7510100-34-A0034, dated February 28, 2003, as an additional source of service information for inspecting to determine the NRM part number, marking the modification plates of the NRM and INU accordingly, testing the INU for discrepant signals, and replacing the unit with a new or modified INU, as applicable. Honeywell Alert Service Bulletin 7510100-34-A0034 refers to Honeywell Alert Service Bulletin 7510134-34-A0016, currently at Revision 001, dated March 4, 2003, as an additional source of service information for marking the modification plates of the NRM and INU.

**Note 5:** Honeywell Service Bulletin 7510100-34-0037, dated July 8, 2004, refers to Honeywell Service Bulletin 7510134-34-0018, dated July 8, 2004, as an additional source of service information for modifying the NRM to the Mod T configuration.

(k) If the inspection specified in paragraph (j) of this AD is done within the compliance time specified in paragraph (f) of this AD, paragraph (g) of this AD does not need to be done.

### **No Reporting Requirement**

(l) Where Honeywell Alert Service Bulletin 7510100-34-A0035, dated July 11, 2003 (or any of the related service information referenced therein), specifies to submit certain information to the manufacturer, this AD does not include that requirement.

### **Alternative Methods of Compliance (AMOCs)**

(m)(1) The Manager, Los Angeles Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested in accordance with the procedures found in 14 CFR 39.19.

(2) Before using any AMOC approved in accordance with 14 CFR 39.19 on any airplane to which the AMOC applies, notify the appropriate principal inspector in the FAA Flight Standards Certificate Holding District Office.

### **Material Incorporated by Reference**

(n) You must use Honeywell Alert Service Bulletin 7510100-34-A0035, dated July 11, 2003; and Honeywell Service Bulletin 7510100-34-0037, dated July 8, 2004, to perform the actions that are required by this AD, unless the AD specifies otherwise. The Director of the Federal Register approved the incorporation by reference of these documents in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Go to <https://pubs.cas.honeywell.com> or contact Honeywell International, Inc., Commercial Electronic Systems, 21111 North 19th Avenue, Phoenix, Arizona 85027-2708, for a copy of this service information. You may review copies at the Docket Management Facility, U.S. Department of Transportation, 400 Seventh Street, SW., Room PL-401, Nassif Building, Washington, DC; on the Internet at <http://dms.dot.gov>; or at the National Archives and Records Administration (NARA). For information on the availability of this material at the NARA, call (202) 741-6030, or go to [http://www.archives.gov/federal\\_register/code\\_of\\_federal\\_regulations/ibr\\_locations.html](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html).

Issued in Renton, Washington, on October 13, 2006.  
Kalene C. Yanamura,  
Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.  
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